



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0570; Directorate Identifier 2013-NM-094-AD; Amendment 39-18201; AD 2015-14-03]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes. This AD was prompted by fuel system reviews conducted by the manufacturer. This AD requires revising the maintenance or inspection program, as applicable, to incorporate new limitations for fuel tank systems. We are issuing this AD to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!docketDetail;D=FAA-2014-0570> or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone: 416-375-4000; fax: 416-375-4539; email: thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0570.

FOR FURTHER INFORMATION CONTACT: Morton Lee, Aerospace Engineer, Propulsion & Services Branch, ANE-173; FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7355; fax: 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes. The NPRM published in the Federal Register on August 18, 2014 (79 FR 48703).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2007-32R2, dated June 27, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition on certain Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes. The MCAI states:

Bombardier Aerospace has completed a system safety review of the aeroplanes fuel system against fuel tank safety standards * * *. The identified non-compliances were then assessed * * *, to determine if mandatory corrective action is required.

The assessment showed that supplemental maintenance tasks are required to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion. Revisions have been made to Part 2 “Airworthiness Limitations List” of the DHC-8 Maintenance Program Manuals to introduce the required maintenance tasks.

Revision 1 of this [Canadian] AD was issued to clarify the phase-in schedule for tasks FSL-02 and FSL-17.

Revision 2 of this [Canadian] AD is issued to correct the effective date of [Canadian] AD CF-2013-07 [http://www.casa.gov.au/scripts/nc.dll?WCMS:OLDASSE T::svPath=/ADFiles/over/dhc-8/,svFileName=CF-2013-07.pdf] referenced in Part III of the Corrective Actions and to clarify the revised phase-in schedules in Part II and Part III of the Corrective Actions.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2014-0570-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 48703, August 18, 2014) or on the determination of the cost to the public.

Changes to this Final Rule

Since the NPRM (79 FR 48703, August 18, 2014) was published, the information in Bombardier Temporary Revision (TR) AWL-110, dated August 31, 2007, to Part 2, “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, Product Support Manual PSM 1-8-7, has been merged in Subject 5-FSL of Section 5, “Fuel System Limitations,” of the “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, PSM 1–8–7, Revision 18, dated February 23, 2012. We have removed paragraph (g)(1) of the proposed AD that referred to Bombardier TR AWL-110, dated August 31, 2007, to Part 2, “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, Product Support Manual PSM 1-8-7, and we have redesignated paragraph (g)(2) of the proposed AD as paragraph (g)(1) of this AD. We have also added new paragraph (g)(5) of this AD to refer to Subject 5-FSL of Section 5, “Fuel System Limitations,” of the “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, PSM 1–8–7, Revision 18, dated February 23, 2012.

We have included a new paragraph (j) in this AD to provide credit for accomplishing the revision to the maintenance or inspection program, as applicable, to incorporate new limitations for fuel tank systems before the effective date of this AD using Bombardier TR AWL-110, dated August 31, 2007, to Part 2, “Airworthiness

Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, Product Support Manual PSM 1-8-7. The subsequent paragraphs have been redesignated accordingly.

Since the NPRM (79 FR 48703, August 18, 2014) was published, we also received Bombardier TR AWL 2–47, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1–82–7, which supersedes Bombardier TR AWL 2–43, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7. We have added paragraph (g)(2) of this AD to refer to Bombardier TR AWL 2–47, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1–82–7, as an appropriate source of service information to accomplish the revision required by paragraph (g) of this AD.

Furthermore, we also received Bombardier TR AWL 3–117, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1–83–7, which supersedes Bombardier TR AWL 3-109, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1–83–7. We have added paragraph (g)(4) of this AD to refer to Bombardier TR AWL 3–117, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1–83–7, as an appropriate source of service information to accomplish the revision required by paragraph (g) of this AD.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 48703, August 18, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 48703, August 18, 2014).

Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued the following service information:

- Bombardier Temporary Revision AWL 2-43, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.
- Bombardier Temporary Revision AWL 2-47, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.
- Bombardier Temporary Revision AWL 3-109, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1-83-7.
- Bombardier Temporary Revision AWL 3-117, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1-83-7.

- Subject 5-FSL of Section 5, “Fuel System Limitations,” of the “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, PSM 1–8–7, Revision 18, dated February 23, 2012.

The service information describes revising the maintenance or inspection program to incorporate new limitations for fuel tank systems. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Costs of Compliance

We estimate that this AD affects 122 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$10,370, or \$85 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2014-0570>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-14-03 Bombardier, Inc.: Amendment 39-18201. Docket No. FAA-2014-0570; Directorate Identifier 2013-NM-094-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD affects AD 2008-13-09, Amendment 39-15572 (73 FR 47029, August 13, 2008).

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes, certificated in any category, serial numbers (S/N) 003 through 624 inclusive, and 626.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance or Inspection Program Revision

Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to include fuel system limitation (FSL) Task Numbers FSL-02, “Detailed Inspection of the Fuel Tank Bonding Jumpers”; and FSL-17, “Functional Check of the Fuel Tank Components and the Plumbing Lines Electrical Bonding”; as specified in the applicable service information identified in paragraphs (g)(1) through (g)(5) of this AD. The initial compliance times for accomplishing the tasks are specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD. Doing this revision terminates the requirements of paragraph (f) of AD 2008-13-09, Amendment 39-15572 (73 FR 47029, August 13, 2008), for Task Numbers FSL-02 and FSL-17 only.

(1) Bombardier Temporary Revision AWL 2-43, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.

(2) Bombardier Temporary Revision AWL 2-47, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.

(3) Bombardier Temporary Revision AWL 3–109, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1–83–7.

(4) Bombardier Temporary Revision AWL 3–117, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1–83–7.

(5) Subject 5-FSL of Section 5, “Fuel System Limitations,” of the “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, PSM 1–8–7, Revision 18, dated February 23, 2012.

(h) Phase-in Compliance Times

For airplanes having S/Ns 003 through 624 inclusive, and S/N 626, the initial compliance times are specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD, as applicable.

(1) For airplanes having S/Ns 003 through 624 inclusive on which the applicable modification summaries (ModSums) specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD have been incorporated before the effective date of this AD: The compliance time for the initial inspection in FSL Task Number FSL–02, “Detailed Inspection of the Fuel Tank Bonding Jumpers”; and the initial functional check in FSL Task Number FSL–17, “Functional Check of the Fuel Tank Components and the Plumbing Lines Electrical Bonding”; is within 6,000 flight hours or 36 months after the effective date of this AD, whichever occurs first. Airplane configurations can be a combination of the configurations specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD.

(i) For airplanes having S/Ns 003 through 624 inclusive: Bombardier ModSum Package 8Q101512, Revision G, dated June 10, 2009; and Bombardier ModSum Package 8Q101865, Revision B, dated May 26, 2008.

(ii) For airplanes having S/Ns 003 through 624 inclusive with auxiliary power unit (APU) option: Bombardier ModSum Package 8Q902144, Revision E, dated June 17, 2009.

(iii) For airplanes having S/Ns 003 through 624 inclusive with a long-range fuel system installed: Bombardier ModSum Package 8Q902091, Revision C, dated December 22, 2006.

(2) For airplanes having S/Ns 003 through 624 inclusive on which the applicable ModSum packages specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD have not been incorporated before the effective date of this AD: The compliance time for the initial inspection in FSL Task Number FSL-02, “Detailed Inspection of the Fuel Tank Bonding Jumpers”; and the initial functional check in FSL Task Number FSL-17, “Functional Check of the Fuel Tank Components and the Plumbing Lines Electrical Bonding”; is before further flight after incorporation of all applicable ModSum packages specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD. Airplane configurations can be a combination of the configurations specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(iii) of this AD.

(3) For the airplane having serial number 626: The initial compliance time is at the applicable time specified in paragraph (h)(3)(i) or (h)(3)(ii) of this AD.

(i) If Bombardier ModSum Package 8Q902091, Revision C, dated December 22, 2006, has been accomplished before the effective date of this AD: The compliance time

for doing the initial inspection specified in FSL Task Number FSL-02, “Detailed Inspection of the Fuel Tank Bonding Jumpers”; and the initial functional check specified in FSL Task Number FSL-17, “ Functional Check of the Fuel Tank Components and the Plumbing Lines Electrical Bonding”; is within 6,000 flight hours or within 36 months after the effective date of this AD, whichever occurs first.

(ii) If Bombardier ModSum Package 8Q902091 Revision C, dated December 22, 2006, has not been accomplished before the effective date of this AD: The compliance time for doing the initial inspection in FSL Task Number FSL-02, “Detailed Inspection of the Fuel Tank Bonding Jumpers”; and the initial functional check in FSL Task Number FSL-17, “ Functional Check of the Fuel Tank Components and the Plumbing Lines Electrical Bonding”; is before further flight after accomplishment of Bombardier ModSum Package 8Q901091.

(i) No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs)

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, and/or CDCCLs may be used unless the actions, intervals, and/or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

(j) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier TR AWL-110, dated August 31, 2007, to Part 2, “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, Product Support Manual PSM 1-8-7, which is not incorporated by reference in this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7300; fax: 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2007-32R2, dated June 27, 2013, for related information.

This MCAI may be found in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2014-0570-0002>.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (m)(3) and (m)(4) of this AD.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Temporary Revision AWL 2-43, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.

(ii) Bombardier Temporary Revision AWL 2-47, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 200 Maintenance Program Manual, PSM 1-82-7.

(iii) Bombardier Temporary Revision AWL 3-109, dated August 31, 2007, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1-83-7.

(iv) Bombardier Temporary Revision AWL 3-117, dated February 16, 2011, to Part 2, “Airworthiness Limitations,” of the Bombardier Dash 8 Series 300 Maintenance Program Manual, PSM 1-83-7.

(v) Subject 5-FSL of Section 5, “Fuel System Limitations,” of the “Airworthiness Limitations List,” of the Bombardier Dash 8 Series 100 Maintenance Program Manual, PSM 1-8-7, Revision 18, dated February 23, 2012.

(3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on June 29, 2015.

Jeffrey E. Duven,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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